D-Jothason H3 4-14-0

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/482,788

DATE: 02/08/2000/ TIME: 14:19:30

Input Set: I482788.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

ENTERED

```
1
     <110> APPLICANT: Randy M. Berka
 2
           Michael W. Rey
           Wendy T. Yoder
 3
     <120> TITLE OF INVENTION: Methods For Producing Polypeptides In
 4
           Cyclohexadepsipeptide-Deficient Cells
 5
 6
     <130> FILE REFERENCE: 5778.200-US
     <140> CURRENT APPLICATION NUMBER: US/09/482,788
 7
     <141> CURRENT FILING DATE: 2000-01-13
 8
     <150> EARLIER APPLICATION NUMBER: 09/229,862
 9
     <151> EARLIER FILING DATE: 1999-01-13
10
     <160> NUMBER OF SEQ ID NOS: 4
11
     <170> SOFTWARE: FastSEO for Windows Version 3.0
12
     <210> SEQ ID NO 1
13
     <211> LENGTH: 11212
14
     <212> TYPE: DNA
15
16
     <213> ORGANISM: Fusarium
17
     <400> SEOUENCE: 1
           aattagattc cactagtacg ccattgtaga atcaaggcca agatatgaac aacccataag
                                                                                    60
18
           taacggcgat cctgtctcat gtatccaaaa ataagagaca cggcatattc actgctttgc
                                                                                   120
19
                                                                                   180
           agatetttet teaaatetet eeetegagaa getaetggga tgaatgagte tettggetea
20
           gattagatat attcactgta tctgccgaat agactttgcc tggtagcatt aacgttccta
                                                                                   240
21
           tattctatta tcaaatcctt acattcaata tggaatatct tactgctgtc gatggtaggc
                                                                                   300
22
           aagacctgcc acctacacca gcttcgtttt gtagtcatgg agatagtccc ctcaatagct
                                                                                   360
23
           cttacgagca actcttccat ctctatggtc tggattcgag tcgcatcgaa gctatcaaac
                                                                                   420
24
           catqcacacc tttccaqctt gacatgatcg actgcaatgc tttggataag cagtctgcta
                                                                                   480
25
           teggecatge ggtgtatgat gteceaaceg acattgaeat etetegttte gegettgegt
                                                                                   540
26
           ggaaggagat cgtcaaccaa accccagcct tgcgagcctt tgccttcacc tcggactctg
                                                                                   600
27
           qaaaqacttc tcaagtcatc ctaaaagata gctttgtctt ctcatggatg tgctggtctt
                                                                                   660
28
           cttcgagctc cccagatgaa gtggttcggg atgaagctgc cgctgctgca tccgggccac
                                                                                   720
29
                                                                                   780
           qctqcaaccg cttcgttcta cttgaagaca tgcagacgaa gaaatgtcag ctggtttgga
30
           ccttcagtca tgcattggta gacgtcactt tccaacaacg cgtcctgagc cgtgttttcg
                                                                                   840
31
           cggcttacaa gcatgagaag gacacacatc ggcctgagac acccgagtca tctgatgcca
                                                                                   900
32
           ctgacactga ctctcagtca gtctccgtgg tgtccatgag ctgcgaggac aatgccgtat
                                                                                   960
33
           cggcgactca tttctggcaa actcacctta acgatctcaa tgcgtccgtc ttccctcacc
                                                                                  1020
34
           tgtctgacca cctgatggtg cccaacccaa ctacaacagc agagcatcgt atcacattcc
                                                                                  1080
35
           ctctttcaca gaaagcacta tccaattctg ccatctgccg tactgcactc tcaatactcc
                                                                                  1140
36
           tetegegeta caeteaetet gaegaggeet tgtttggtge ggtaaetgag caatetetae
                                                                                  1200
37
                                                                                  1260
           catttgacaa acactatett geagatggta egtaceaaac agttgeacee ettegtgtae
38
                                                                                  1320
39
           actgccaatc aaatcttcgt gcatcagatg tcatggatgc aatctcttct tacgatgatc
           qccttqqtca tctcqcccca tttggccttc gcgacatccg caacactggt gataatggct
                                                                                  1380
40
           ctgccgcctg cgatttccaa actgttttac tcgtcaccga tggcagccac gtaaacaatg
                                                                                  1440
41
           gtatcaacgg tttcctccaa cagataacag agtcaagcca tttcatgcct tgcaacaacc
                                                                                  1500
42
           gtgccctcct tctgcactgt cagatggaaa gtagcggagc tctgctggtt gcctactatg
                                                                                  1560
43
                                                                                  1620
           accacaatgt tatcgattcg cttcagacaa cgcgtctgct acagcagttt ggtcatctga
44
```

PAGE: 2

## RAW SEQUENCE LISTING PATENT APPLICATION US/09/482,788

DATE: 02/08/2000 TIME: 14:19:30

45	tcaagtgttt	gcaaagtcct	ctagacctga	gctctatggc	tgaggtcaac	ttgatgactg	1680
46	agtatgacag	agcagagatt	gagagttgga	actcgcaacc	gttagaggta	caggataccc	1740
47	tgatccacca	tgagatgttg	aaagctgttt	ctcattcccc	caccaaaacg	gccatccaag	1800
48	cgtgggatgg	agactggacc	tattccgagc	tcgacaatgt	ttcgtcaaga	ctcgctgtcc	1860
49	atatcaagtc	acttggcctt	agagctcagc	aagccattat	tccagtctac	tttgagaagt	1920
50 .	cgaaatgggt	cattgcttca	atgctggctg	ttctcaagtc	tggtaatgct	ttcactctaa	1980
51	ttgatcccaa	tgatccacca	gctcgaactg	cccaggtcgt	cacgcagact	cgggcgactg	2040
52	tagcgcttac	ttccaagcta	caccgcgaga	ctgtacagaa	gcttgtaggc	cgttgcgttg	2100
53	tggttgatga	cgagcttctg	caatcagttt	ctgccagcga	cgatttctca	agtctgacca	2160
54	aatcgcaaga	cttggcctac	gtgatcttca	cttctggtag	cacgggcgac	ccgaaaggca	2220
55	tcatgattga	acaccgagcg	ttctcatcat	gtgcactcaa	gttcggcgcg	tctcttggca	2280
56	tcaactctga	tactcgtgcc	ctacaatttg	gaacccatgc	ctttggcgca	tgtcttctcg	2340
57	agattatgac	tactctcatc	aacggtggct	gcgtttgtat	tccctccgac	gatgatcgta	2400
58				acaacgttaa			2460
59	-			ttcctggcct			2520
60	-			tctgggcccc			2580
61				gttttgcctc			2640
62				catgggtcat			2700
63				tggtcattga			2760
64				cccattctt			2820
65				aactctacag			2880
66				ggcgcataga			2940
67				cccatctccg			3000
68				cccaatctgc			3060
69				atagaccctc			3120
70				tggagcaggt			3180
71				cacgtactgc			3240
72				tggacaagca			3300
73				cagacacagc			3360
74				cggtcaatgt			3420
75				tggtgaacat			3480
76				cgacgcttgc			3540
77				ccaagtcaac			3600
78		-		tggatcagtt			3660
79	-			ggcctgtcaa			3720
80	-			ctcttagaac			3780
81				tttctgagga			3840
82				tgaaccaaga			3900
83				tcttacgact			3960
84				atggttggtc			4020
85	_	_		aggactcaaa			4080
86		-		caaaatggca			4140
87		_	-	aactcaaaga			4200
88				ctggagacgc			4260
89				ccttctgcaa	-		4320
90		_		ctcattatcg			4380
91				accgacctga			4440
92				acatagatca			4500
93				cagcattcga			4560
94				ccagagatct			4620
74	aycycyttyt	accaycacca	caycolygat	ccayayacct	Jecaugeaca	Joegegeac	7020

DATE: 02/08/2000 TIME: 14:19:30 RAW SEQUENCE LISTING PAGE:

PATENT APPLICATION US/09/482,788

95	aactcatttt	tgcagtgcac	tcacagaagg	accttggaag	attcaagttc	cagggtctcg	4680
96		tgtgcctagc					4740
97		cagccttaaa					4800
98		tgtcgtcaga					4860
99		ctcaatactt					4920
100		caaacatgtc					4980
101		tgcttacccc					5040
102		ggatcgccag					5100
103		gcttgtcgca					5160
104	ttggtgtgtt	gaaggcgaac	ttggcctatc	ttcctctcga	tgtacgatcg	ccctcggcga	5220
105	gagttcagga	tatactttct	ggactttctg	ggcctaccat	tgttttgatt	ggccatgata	5280
106	cagcgcctcc	cgatatcgag	gttactaacg	tcgagtttgt	tcgtatccgg	gatgcgctga	5340
107	atgacagcaa	tgcagatggc	tttgaagtca	tcgagcacga	cagcacaaag	ccctcagcca	5400
108	cgagtctcgc	atacgtgctg	tatacctcag	gatccactgg	ccgaccaaaa	ggcgtcatga	5460
109		tgtcattatt					5520
110	aaacgaggat	ggctcacatg	gcgaccattg	cgtttgacgg	cgcatcgtac	gagatctaca	5580
111	gcgccctttt	gttcggaagg	acacttgttt	gcgttgacta	catgacaacc	ctcgacgcta	5640
112	gagcactcaa	ggatgtgttt	ttccgagagc	atgtcaacgc	ggcaagtcat	gtcaccagct	5700
113	cttctcaaga	tgtacctctc	cgagtcccga	gaaggctctc	gagaaccttg	atgttcttct	5760
114	tcttggtggt	gacagattcg	acggccccag	atgctctcga	tgcgcaggga	ctttatcaag	5820
115	gggtccagtg	ttacaatggt	tacggcccaa	cagagaatgg	agtcatgagt	acaatctatc	5880
116	ccattgactc	gactgagtcg	ttcatcaatg	gagtcccaat	tggacgagct	ctgaacaact	5940
117	caggagcgta	tgtcgtggat	cctgagcaac	agcttgttgg	cattggtgtg	atgggagagc	6000
118	ttgttgtcac	tggcgatggt	cttgcgcggg	gctacagtga	caaagccctt	gacgagaacc	6060
119	gttttgtgca	cattactgtc	aatgaccaga	cagtgaaggc	gtatcgcact	ggcgatcgag	6120
120	tgcggtacag	gattggagat	ggcctcatcg	agttcttcgg	acgtatggac	acccagttca	6180
121	agattcgtgg	caatcgtatc	gaatcagctg	agattgaagc	ggcccttctg	cgcgactcct	6240
122	ccgtccgaga	tgctgctgtc	gtccttcagc	agaatgagga	tcaagcgcct	gagatcttgg	6300
123	ggtttgttgt	tgctgatcat	gatcattctg	agaatgacaa	gggacaatct	gccaatcaag	6360
124	tcgaaggatg	gcaagaccat	ttcgagagtg	gcatgtattc	cgacattggc	gaaattgacc	6420
125	cgtcgacgat	tggtagcgac	ttcaagggtt	ggacatcaat	gtatgatgga	agtcaaatcg	6480
126	acttcgatga	gatgcacgag	tggcttggtg	agactacccg	gacactccat	gacaatcgct	6540
127	ctctaggcaa	tgtccttgaa	attggaacag	gtagcggcat	gatcctcttc	aaccttgaca	6600
128	gcaggcttga	gagttacgtt	ggtcttgaac	catccagatc	agcagctgca	tttgtcaaca	6660
129	aagctaccga	gtctatacca	tegettgetg	gaaaagccaa	ggttcaggtt	ggaacagcta	6720
130	cagatattgg	tcaagtcgat	gacttacacc	ctgacctcgt	ggttctcaac	tcagtcattc	6780
131	agtatttccc	gtcttcggag	taccttgcag	aaatcgcaga	caccttgatt	catctgccta	6840
132	acgtgcagcg	gattttcttt	ggcgatgtcc	gatcgcaggc	caccaacgag	cacttccttg	6900
133	ctgccagggc	tatccacaca	ctggggaaga	atgcaacgaa	ggacgatgtt	cgacagaaaa	6960
134	tggcagaatt	ggaggacatg	gaggaggagt	tgcttgttga	acctgctttc	ttcacctcgt	7020
135	tgaaagacag	gtttccaggt	ctggtggaac	atgttgagat	cctgccaaag	aacatggaag	7080
136		gctcagtgcg					7140
137	gagatgagct	tgtgcttccg	gttgagaaag	atgactggat	cgactttcaa	gcgaatcaat	7200
138		gtcactgggt					7260
139		tttcgaaatc					7320
140		gtggcagcta					7380
141		catctttcgc					7440
142		gtctcagaat					7500
143		ggtcaacttt					7560
144		tcagcgactg					7620
		_		-		·	

RAW SEQUENCE LISTING PAGE:

DATE: 02/08/2000 TIME: 14:19:30 PATENT APPLICATION US/09/482,788

145	ggtccttact	tccatcgtac	atgatcccat	cgaacatcgt	tgttctggac	aagatgcctc	7680
146	tcaacgccaa	tggtaaagtt	gaccggaagg	aactctctcg	cagggcaaag	gttgtaccga	7740
147	agcagcagac	agcagcgccg	ttaccgacat	ttcccatcag	tgaggtcgaa	gtcattcttt	7800
148	gcgaagaagc	cactgaggtg	tttggcatga	aggttgacat	taccgatcac	ttcttcaatc	7860
149	tcggtggaca	ctctctcttg	gccacgaagc	tcatttctcg	tatcgaccaa	cgactcaagg	7920
150	tccgtatcac	tgtcaaggat	gtctttgacc	atcctgtatt	tgcggatcta	gcatctgtca	7980
151 .	tccgtcaagg	gctgggtttg	caacaacccg	tttctgatgg	tcagggacaa	gacagatctg	8040
152	cccacatggc	accccgtacc	gagactgaag	ctatactctg	tgatgagttt	gcaaaggttc	8100
153	tggggttcca	agtcgggatt	acagacaatt	tctttgatct	tggtggtcat	tcactcatgg	8160
154	ctactaaact	cgctgtgcgc	atcggacatc	gacttgacac	gactgtttcg	gtgaaggatg	8220
155	ttttcgatca	tcctgtactc	ttccaacttg	caattgcatt	ggataacttg	gttcaatcca	8280
156	agaccaatga	gatagttgga	ggtagagaaa	tggctgaata	ctcacctttc	caactcctct	8340
157	ttacagaaga	cccagaggag	tttatggcga	gcgagatcaa	gccacaactt	gagttacagg	8400
158	aaatcattca	agacatatat	ccgtctaccc	agatgcagaa	ggctttcctc	ttcgatcaca	8460
159	caactgcgcg	cccgagacct	ttcgtgccgt	tctacatcga	cttccccagc	acttccgagc	8520
160		aggtctaatc					8580
161	-	tgcagaggca					8640
162	•	agtgattgag					8700
163		gaaagagcca					8760
164	aacaaaccaa	gtcgatgcgt	gtgataatga	gaatatcgca	tgccctgtat	gatggtctga	8820
165		tgtcgtgcgc					8880
166	cacaccaatt	ctcgcggtac	atgcagtata	ctgctgacgg	tcgcgaaagt	ggacatggat	8940
167	tttggcgcga	tgtgattcaa	aatacgccca	tgacaatatt	gagtgatgac	acggttgttg	9000
168		tgcaacctgc					9060
169	aggtacttcg	aggcagcagt	aacatcatta	ctcaagctac	tgtgtttaac	gcagcctgcg	9120
170	cgttagtctt	gtcacgggaa	tctgactcga	aagacgttgt	ctttggacgc	atcgtctctg	9180
171	gtcgtcaagg	cttgcctgtt	gaataccagg	acattgtcgg	gccttgtacc	aacgcagttc	9240
172	ctgttcgcgc	tcatatagag	tcgtcagatt	acaaccaatt	gctgcacgac	atccaagacc	9300
173	agtaccttct	cagcttgcca	cacgaaacaa	ttggcttctc	agatctcaag	cgcaactgta	9360
174	cagattggcc	agaagcaatc	accaacttct	catgctgcat	cacataccac	aatttcgagt	9420
175	accatcccga	gagtcagttc	gaacagcaga	gagttgagat	gggtgtattg	acaaagtttg	9480
176	tcaacattga	gatggatgag	ccactatatg	${\tt atttggcgat}$	tgcgggtgaa	gttgaaccag	9540
177	acggagcagg	actgaaggtt	actgttatcg	cgaagacgca	gttatttggt	aggaagagag	9600
178	tagaacatct	gttggaggaa	gtttccaaaa	cgtttgaggg	tctcaactct	tctttgtaac	9660
179	gcacgggttg	gtctcaatcg	tcgcgacaga	acaaccgatg	taggtttgta	attcttaatg	9720
180	acgtctttga	ctttttggtt	tttaccattc	ggagcaaata	gtaagcagaa	cactggcaaa	9780
181	tgtcagatat	tacacttcag	aactattatc	ttgactatta	tctcacgttg	tcagctttca	9840
182	catgcttgct	acgttcgatc	gagtcaaaaa	ttgagatcta	cagggtaacg	caggaatcca	9900
183	gaacaattga	caaggattca	tcgatcgaac	actatgattg	gttcgcgtct	ctgacaggac	9960
184		ataatagaag					10020
185		agcttgatct					10080
186		tgaattatca					10140
187	ttttggatat	atataagttc	ataaaggtat	gactcttgat	atgatcaaat	tagaaacaat	10200
188		tattgtgttc					10260
189		gatctgtcca					10320
190		tctgcacctg					10380
191		atcaatccag					10440
192		tatcctctca					10500
193		agtcgattta					10560
194	caagcgagga	agaagtcccg	acgaaggcgc	atttcaagaa	gtttgcatca	tgcgagagca	10620

PAGE: 5 RAW SEQUENCE LISTING DATE: 02/08/2000

PATENT APPLICATION US/09/482,788 TIME: 14:19:30

•														E				
195		ttt	gact	qct (	cgaat	ttcc	ag a	qcqt	gtta	c qt	ccac	cqat	gcc	agcg	ttt	tgcc	tctgac	10680
196																	acctca	
197			-	_		_	_	_					_	_			tacaag	
198		tgt	tggg.	aga a	aatg	ctgt	ac a	gctt	gctg	t cg	cggc	cggc	tat	gatg	ttg	taga	gacagc	10860
199		atc	acct	aag	aact	ggga	ta t	cgta	cgcg	g to	tcgg	cgct	tgt	gcag	ttt	ttga	ctatca	10920
200		cag	ctca	tcg	gcca	taaa	cg a	tgtg	gtate	c tg	cttt	caag	gac	aaga	aat	gcgc	aggtgc	10980
201		tgt	agct	att 🤉	ggtc	aagg	gt c	actg	gcga	a at	gcgt	cgac	att	gtca	aaa	gcgt	tccggg	11040
202		agc	cacc	aag	aatg	ttgc	gc a	agtt	accc	t ct	caat	gcct	gag	tcac	agc	caac	aaccaa	11100
203		gat	atcc	atg a	attc	cgtt	tg t	cgca	aagt	a tt	tatg	gatg	gcg	ggaa	ctg	atcg	actcaa	11160
204		ggt	tgcg	agc a	agtg	gagt	cc a	aagc	aagti	t tg	tttt	tggt	aca	gaca	taa	tt		11212
205	<210>	SEQ	ID :	NO 2														
206	<211>	LEN	GTH:	312	9													
207	<212>	TYP	E: P	RT														
208	<213>	ORG.	ANIS	M: F	usar	ium												
209	<400>	SEQ	UENC:	E: 2														
210		Met	Glu	Tyr	Leu	Thr	Ala	Val	Asp	Gly	Arg	Gln	Asp	Leu	Pro	Pro	Thr	
211		1				5					10					15		
212		Pro	Ala	Ser	Phe	Cys	Ser	His	Gly	Asp	Ser	Pro	Leu	Asn	Ser	Ser	$\mathtt{Tyr}$	
213					20					25					30			
214		Glu	Gln	Leu	Phe	His	Leu	Tyr	Gly	Leu	Asp	Ser	Ser	Arg	Ile	Glu	Ala	
215				35					40					45			•	
216		Ile	_	Pro	Cys	Thr	Pro		Gln	Leu	Asp	Met		Asp	Cys	Asn	Ala	
217			50					55				•	60					
218			Asp	Lys	Gln	Ser		Ile	Gly	His	Ala		Tyr	Asp	Val	Pro		
219		65					70			_		75	_				80	
220		Asp	Ile	Asp	Ile		Arg	Phe	Ala	Leu		Trp	Lys	Glu	Ile	Val	Asn	
221			_,	_		85	_	_ •			90		_	_	_	95	_	
222		Gin	Thr	Pro		Leu	Arg	Ala	Pne		Pne	Thr	ser	Asp		Gly	гÀг	
223		ml	<b>a</b>	a1 -	100	<b>-</b> 1-	T	T	3	105	Dh.i	**- 7	Db	<b>a</b>	110		Q	
224		Thr	ser		vaı	TTE	Leu	ьys	_	ser	Pne	vaı	Pne		ттр	Met	Cys	
225		TT-222	Cox	115	Cox	Cor	Com	Dwo	120	C1	37-1	1707	7 ~~~	125	~1.,	77.	77-	
226 227		пр	130	ser	ser	per	ser	135	Asp	GIU	vaı	Val	140	Asp	GIU	Ala	AIA	
227		λla		λla	Sor	Glv	Dro		Cva	λαn	λνα	Dho		T.011	T.011	Glu	λen	
229		145	AIG	ALG	DCI	GLY	150	A-9	Cys	ASII	nr 9	155	Val	Lieu	пец	GIU	160	
230			Gln	Thr	Lvs	Lvs		Gln	Len	Va 1	Ψrn		Phe	Ser	His	Ala		
231		1100	01		Lyb	165	Cyb	0111		Vul	170		1110	501		175	Leu	
232		Va1	Asp	Val	Thr		Gln	Gln	Ara	Val		Ser	Ara	Va l	Phe	Ala	Ala	
233					180				5	185			5		190			
234		Tvr	Lvs	His		Lvs	Asp	Thr	His		Pro	Glu	Thr	Pro		Ser	Ser	
235		- 2	4	195					200					205				
236		Asp	Ala		Asp	Thr	Asp	Ser		Ser	Val	Ser	Val		Ser	Met	Ser	
237			210				-	215					220					
238		Cys		Asp	Asn	Ala	Val		Ala	Thr	His	Phe		Gln	Thr	His	Leu	
239		225		-	·		230					235	•			-	240	
240			Asp	Leu	Asn	Ala		Val	Phe	Pro	His		Ser	Asp	His	Leu		
241			-			245					250			-		255		
242		Val	Pro	Asn	Pro	Thr	Thr	Thr	Ala	Glu	His	Arg	Ile	Thr	Phe	Pro	Leu	
243					260					265		_			270			
244		Ser	Gln	Lys	Ala	Leu	Ser	Asn	Ser	Ala	Ile	Cys	Arg	Thr	Ala	Leu	Ser	

PAGE:

VERIFICATION SUMMARY DATE: 02/08/2000 PATENT APPLICATION US/09/482,788 TIME: 14:19:30 VERIFICATION SUMMARY

Input Set: I482788.RAW

Line ? Error/Warning Original Text